

CLAIMS

This listing of the claims replaces any and all prior versions and listings of claims in the application:

Claims 1-8 (Canceled)

9. (Currently amended) A method of inhibiting the proliferation of cancer cells in a subject comprising administering, to the subject, an effective amount of at least one isolated peptide having a sequence selected from:

Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);
Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);
Cys Val His Ala Phe Arg Ser (SEQ ID NO:3); and
~~Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);~~
~~Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);~~
~~Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);~~
~~Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);~~
~~Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);~~
~~Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);~~
~~Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);~~
~~Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); and~~
~~Cys Val His Thr Phe Arg Ala (SEQ ID NO:12);~~

wherein the sequence peptide exhibits an antiproliferative activity.

10. (Original) The method of claim 9, where the cancer cells are breast cancer cells.
11. (Original) The method of claim 9, where the cancer cells are lung cancer cells.
12. (Original) The method of claim 9, where the cancer cells are colon cells.
13. (Original) The method of claim 9, where the cancer cells are melanoma cells.
14. (Original) The method of claim 9, where the cancer cells are leukemia cells.

15. (Currently amended) A method of inhibiting the proliferation of viral infection in a subject comprising administering, to the subject, an effective amount at least one isolated peptide having a sequence selected from:

Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);
Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);
Cys Val His Ala Phe Arg Ser (SEQ ID NO:3); and
Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);
Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);
Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);
Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);
Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);
Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);
Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);
Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); and
Cys Val His Thr Phe Arg Ala (SEQ ID NO:12);

wherein the sequence peptide exhibits an antiproliferative activity.

16. (Original) The method of claim 15, where the virus is human immunodeficiency virus type 1.
17. (Original) The method of claim 15, where the virus is a Bunyavirus.
18. (Original) The method of claim 15, where the virus is a Togavirus.
19. (Original) The method of claim 15, where the virus is a Reovirus.
20. (Original) The method of claim 15, where the virus is a Herpesvirus.
21. (Original) The method of claim 15, where the virus is a Poxvirus.
22. (Previously presented) An isolated peptide selected from the group consisting of:
Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);

Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);
Cys Val His Ala Phe Arg Ser (SEQ ID NO:3);
Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);
Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);
Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);
Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);
Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);
Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);
Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);
Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); and
Cys Val His Thr Phe Arg Ala (SEQ ID NO:12).

23. (Canceled)

24. (Canceled)

25. (Currently amended) A composition comprising an excipient and at least one isolated peptide ~~having a sequence~~ consisting essentially of:

Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);
Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);
Cys Val His Ala Phe Arg Ser (SEQ ID NO:3);
Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);
Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);
Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);
Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);
Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);
Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);
Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);
Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); or
Cys Val His Thr Phe Arg Ala (SEQ ID NO:12).

26. (Currently amended) A method of inhibiting proliferation of cancer cells in a subject comprising administering to the subject an effective amount of at least one isolated peptide ~~having a sequence~~ consisting essentially of:

~~Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);~~
~~Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);~~
~~Cys Val His Ala Phe Arg Ser (SEQ ID NO:3); or~~
~~Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);~~
~~Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);~~
~~Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);~~
~~Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);~~
~~Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);~~
~~Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);~~
~~Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);~~
~~Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); and~~
~~Cys Val His Thr Phe Arg Ala (SEQ ID NO:12).~~

27. (Currently amended) A method of inhibiting proliferation of viral infection in a subject comprising administering to the subject an effective amount of at least one isolated peptide ~~having a sequence~~ consisting essentially of:

~~Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);~~
~~Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);~~
~~Cys Val His Ala Phe Arg Ser (SEQ ID NO:3); or~~
~~Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);~~
~~Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);~~
~~Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);~~
~~Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);~~
~~Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);~~
~~Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);~~
~~Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);~~
~~Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); and~~

~~Cys Val His Thr Phe Arg Ala (SEQ ID NO:12).~~

28. (Currently amended) An isolated peptide having a sequence selected from:

~~Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);~~
~~Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);~~
~~Cys Val His Ala Phe Arg Ser (SEQ ID NO:3); and~~
~~Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);~~
~~Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);~~
~~Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);~~
~~Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);~~
~~Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);~~
~~Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);~~
~~Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);~~
~~Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); and~~
~~Cys Val His Thr Phe Arg Ala (SEQ ID NO:12);~~

wherein the sequence peptide exhibits an antiproliferative activity.

29. (Currently amended) A composition comprising an excipient and at least one isolated peptide having a sequence selected from:

~~Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);~~
~~Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);~~
~~Cys Val His Ala Phe Arg Ser (SEQ ID NO:3); and~~
~~Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);~~
~~Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);~~
~~Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);~~
~~Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);~~
~~Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);~~
~~Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);~~
~~Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);~~
~~Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); and~~

Cys Val His Thr Phe Arg Ala (SEQ ID NO:12),

wherein the sequence peptide exhibits an antiproliferative activity.

30. (Previously presented) A composition consisting essentially of an isolated peptide selected from the group consisting of:

Cys Val His Ala Tyr Arg Ser (SEQ ID NO:1);
Cys Val His Ala Tyr Arg Ala (SEQ ID NO:2);
Cys Val His Ala Phe Arg Ser (SEQ ID NO:3);
Cys Val His Ala Phe Arg Ala (SEQ ID NO:4);
Cys Val His Ser Tyr Arg Ser (SEQ ID NO:5);
Cys Val His Ser Tyr Arg Ala (SEQ ID NO:6);
Cys Val His Ser Phe Arg Ser (SEQ ID NO:7);
Cys Val His Ser Phe Arg Ala (SEQ ID NO:8);
Cys Val His Thr Tyr Arg Ser (SEQ ID NO:9);
Cys Val His Thr Tyr Arg Ala (SEQ ID NO:10);
Cys Val His Thr Phe Arg Ser (SEQ ID NO:11); and
Cys Val His Thr Phe Arg Ala (SEQ ID NO:12).